

# LESSON PLAN

## INTRODUCTION

### DUMP TRUCK TAILGATE OPERATIONS

Dump Truck operators have the primary responsibility for safe operations and are required to be trained and certified on the following procedures.

These procedures are to be followed when using a front-end loader or forklift to remove (detach) or install the tailgate on a dump truck, and are applicable on any size dump truck (e.g. 5, 10, 20-ton Dump Truck etc.)

Tailgate removal/installation operations are to be accomplished during daylight hours, when possible, with all personnel on the ground standing clear of the dump truck, tailgate and forklift.

This lesson plan includes “Personnel, Qualifications & Equipment Requirements”, instructions for “Removal of Tailgate” and instructions for “Installation of Tailgate.”

Certificate of Competency AF Form 483 will be issued to Dump Truck Operators upon successful demonstration of these procedures. This training will be **renewed every three years** and is required for issue of government drivers license for dump truck operations.

Civil Engineer Vehicle Control NCO's will ensure compliance with above requirements.

## LESSON 1 - PERSONNEL, QUALIFICATIONS & EQUIPMENT REQUIREMENTS

**Personnel required:** Three - one forklift/loader (with fork attachment) operator, one dump truck operator, and one safety spotter).

**Qualifications:** Current license or AF Form 171 for each vehicle operator.

**PPE:** Hardhat, Gloves, Hearing Protection, Steel toe Boots and Eye Protection

**NOTE:**

Eye protection is only required if there is a need to use the hammer and punch.

**Equipment:** Fully operational forklift/loader with attachments rated for adequate weight to perform the job.

Fully operational dump truck with spreader chains, safety pins, and hinges.

**Tools:** Ball pined hammer and punch

## LESSON 2 - REMOVAL OF TAILGATE

<u>STEP</u>	<u>DESCRIPTION</u>
1.	Perform operational check on each vehicle using AF Form 1800/1806.
2.	Dump Truck operator will conduct pre-brief of safety/operational procedures listed in this lesson plan with forklift/loader operator and safety spotter to include hand signal review.
3.	Dump Truck operator will, remove left and right tailgate spreader chains from chain supports located on truck prior to positioning the front loader/forklift. This should be done in most cases from the ground.



**NOTE:**

This step is important to prevent binding of tailgate that could lead to complications in the removal process.

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| 4. | Dump truck operator will ensure tailgate-locking lever is in the closed and locked position.   |
| 5. | Safety spotter will direct front loader/forklift operator by use of hand signals to place forks approximately 12-inches below the top of the tailgate and a few inches away from the tailgate. |

**CAUTION**

Safety spotter will ensure personnel are clear of tailgate area and forklift path.

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| 6. | Dump truck operator enters truck bed using the truck ladder and pulls retaining/cotter pins from top pivot pins of tailgate and taps out the hinge pins. Use a punch if necessary; <b>NEVER</b> insert fingers into hinge. |
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**CAUTION**

Must have eye protection if required to use hammer and punch to remove pins.

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| 7. | Dump Truck operator will push tailgate at the top to free it from the top pivot points allowing the top of the tailgate to fall freely onto the forklift. |
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**CAUTION**

Dump truck operator will move safely away from the tailgate after pushing tailgate.

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| 8. | Dump truck operator exits truck bed using the truck ladder. |
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**CAUTION**

Safety spotter must ensure all personnel are safely away from the tailgate during steps 10 through 15. When the bottom of the tailgate is hinged and the top of the tailgate resting on the forklift, there is a risk of the tailgate quickly slamming back to the dump truck when the forklift is moved.

Never allow personnel to "hands-on" assist the front loader/forklift

If problems are encountered, operations will stop and the Dump truck operator, safety spotter, and forklift operator will consult to develop a plan before resuming operation.

9. Safety spotter directs forklift operator to slowly lower the forklift until the tailgate becomes level with the bed of truck.
10. Safety spotter directs forklift operator to move towards dump truck slowly to fully support tailgate.

**CAUTION**

Tailgate could rapidly slam back up to the truck.

11. Dump truck operator pulls tailgate release lever.
12. Forklift operator removes tailgate safely away from dump truck and places tailgate on dunnage.
13. Dump truck operator re-installs hinge/cotter pins into tailgate holes for safekeeping.

### LESSON 3 - INSTALLATION OF TAILGATE

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| 1.   | Perform operational check on each vehicle using AF Form 1800/1806.   |
| 2.   | Dump Truck operator will conduct pre-brief of safety/operational procedures listed in this lesson plan with forklift/loader operator and safety spotter to include hand signal review. |
| 3.   | Dump truck operator will remove retaining/cotter pins from tailgate holes and tap out hinge pin if necessary.  |

#### **CAUTION**

Must have eye protection if required to use hammer and punch to remove pins.

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| 4. | Safety spotter will direct front loader/forklift operator to place tailgate on forks. Safety spotter will ensure the tailgate is positioned with the bottom of the tailgate away from the loader and that the forks do not protrude past the lower edge of the tailgate. |
| 5. | Dump truck operator opens the tailgate release lever and ensures it remains in the open position.  |

#### **CAUTION**

Safety spotter must ensure all personnel are safely away from the tailgate during steps 6 through 12. When the bottom of the tailgate is hinged and the top of the tailgate resting on the forklift, there is a risk of the tailgate quickly slamming back to the dump truck when the forklift is moved.

Never allow personnel to "hands-on" assist the front loader/forklift.

If problems are encountered, operations will stop and the Dump truck operator, safety spotter, and forklift operator will consult to develop a plan before resuming operation.

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| 6. | Safety spotter directs the front loader/forklift operator to move the tailgate to the dump truck   |
| 7. | Safety spotter directs front loader/forklift to keep forks level while moving to dump truck and carefully aligns/places lower pivot pins of the tailgate into the saddles of the dump truck bed. |
| 8. | Dump truck operator closes and locks the tailgate release lever.   |
| 9. | Safety spotter directs front loader/forklift operator back until only about 12-16 inches of the forks engage the tailgate.   |

#### **CAUTION**

Must have eye protection if required to use hammer and punch to remove pins.

(**CAUTION:** Ensure all personnel are safely away from tailgate).

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| 10. | Front loader/forklift operator slowly raises forks up to raise the tailgate   |
| 11. | Safety spotter directs the front loader/forklift operator to stop and then move slowly forward until the forks are again 12- to 16-inches from the top of the tailgate. |

#### **CAUTION**

Tailgate could slam back up to the truck.

12. Repeat steps 10 & 11 as necessary until the tailgate is in the full upright position and closed.

**CAUTION**

Tailgate could slam back up to the truck.

13. Once tailgate is in position, dump truck operator enters the bed, installs the upper pivot pins and secures them with the retaining/cotter pins.

**CAUTION**

Never insert fingers into hinge.

14. Loader operator removes loader from the area.  
15. Dump truck operator exits truck bed using the truck ladder.  
16. Dump truck operator installs and adjusts the spreader chains. This should be done in most cases from the ground.